

ATTORNEY DOCKET NO. 03269.0029U2
APPLICATION NO. 09/032,893



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
)	
BIESER <i>et al.</i>)	Art Unit: 1771
)	
Application No. 09/032,893)	Examiner: Juska, C.
)	
Filing Date: February 27, 1998)	Confirmation No. 1428
)	
For: HOMOGENEOUSLY BRANCHED)	
ETHYLENE POLYMER CARPET,)	
CARPET BACKING AND METHOD FOR)	
MAKING SAME)	

APPEAL BRIEF TRANSMITTAL

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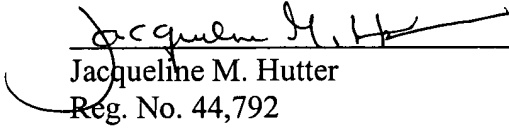
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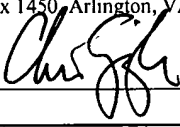
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Chris Czajka

Date 9/10/04



ATTORNEY DOCKET NO. 03269.0029U2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of)	
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Bieser <i>et al.</i>)	Art Unit: 1771
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Application No. 09/032,893)	Examiner: Juska, C.
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Filing Date: February 27, 1998)	Confirmation No. 1428
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For: HOMOGENEOUSLY BRANCHED)	
ETHYLENE POLYMER CARPET,)	
CARPET BACKING AND METHOD))	
FOR MAKING SAME)	

APPEAL BRIEF UNDER 37 C.F.R. §1.192

Mail Stop Appeal Brief - Patents
Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

This Appeal Brief under 37 C.F.R. §1.192 is submitted in support of the Notice of Appeal filed May 17, 2004, appealing to the Board from the action of the Examiner's Final Office Action, mailed February 17, 2004, finally rejecting claims 1, 3-6, 9-12 and 15-17 of the above referenced application. Submitted herewith is a Request for a Two-Month Extension of Time, along with the requisite fee, thereby extending the due date for this Appeal Brief to September 17, 2004. Also submitted herewith is the required fee for filing this brief. All materials are submitted herewith in triplicate.

I. REAL PARTY IN INTEREST

The real party in interest of the instant application is Columbia Insurance Company, a Nebraska corporation, which is itself wholly owned by Berkshire Hathaway, a Delaware corporation.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences that will directly affect or that will be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF THE CLAIMS

Claims 1, 3-6, 9-12 and 15-17 are pending in the application and are being appealed. Claims 2, 7-8 and 13-14 have been cancelled. Claims 1, 3-6, 9-12 and 15-17 stand finally rejected under 35 U.S.C. §103(a), which rejection forms the basis of this appeal. The pending claims are attached herewith as Appendix I.

IV. STATUS OF AMENDMENTS

There were no amendments filed subsequent to the Final Office Action.

V. SUMMARY OF THE INVENTION

The present invention addresses a carpet or carpet tile having an adhesive composition (or "backcoat")¹ comprising, in significant part, a homogenously branched linear ethylene polymer ("HBEP"). The composition of the HBEP is described in the as-filed specification at, *inter alia*, pages 18-26. This adhesive composition serves to adhere to the plurality of fibers in a tufted carpet or carpet tile. As claimed, the adhesive composition is not integrally fused to the primary backing material. This feature is described on page 10, lines 8-20 of the specification. The recited character of the incorporation of the adhesive composition as having "substantially penetrated and substantially consolidated the fibers" is described on page 10, lines 2-7 and page 19, lines 3-12. The resulting tuft bind of the carpet or carpet tile is recited in the claims as "5 pounds or more as measured according to ASTM D-1335-67." A description of this tuft bind strength is found in the specification at page 19, lines 10-12 and page 49, lines 21-22.

VI. CONCISE STATEMENT OF THE ISSUES PRESENTED FOR REVIEW

The issue in this appeal is whether claims 1, 3-6, 9-12 and 15-17 are obvious over U.S. Patent Number 6,344,515 (“Parikh”) in view of U.S. Patent No. 5,545,276 (“Higgins”) and U.S. Patent No. 5,240,530 (“Fink ‘530”). A further issue in this appeal is whether claim 17 is patentable over Parikh in view of Higgins and Fink ‘530 and further in view of U.S. Patent Number 5,741,594 (“Jialanella”).

VII. GROUPING OF THE CLAIMS

The claims stand or fall together.

VIII. ARGUMENT

Claims 1, 3-6, 9-12 and 15-17 have been rejected under 35 U.S.C. § 103(a) (“§ 103(a)”) as being obvious over Parikh, in view of Higgins and Fink ‘530. Claim 17 has been rejected under § 103(a) as being obvious over these same references and further in view of Jialanella. Applicants respectfully traverse these rejections.

A. Case Law of 35 U.S.C. § 103(a)

Where claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under § 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. *See In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988). Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1444 (Fed. Cir. 1991).

¹ The various Office Actions use the word “backcoat” to describe the claimed adhesive composition layer. For clarity, and without reference to whether Applicants believe that “backcoat” is the term that would be used by one of ordinary skill in the art to describe this feature of the claimed invention, Applicants use this term herein.

A combination of references must expressly or impliedly suggest all of the features of the claimed invention. *In re Gorman*, 933 F.2d 982, 986-987, 18 U.S.P.Q.2d 1885, 1888 (Fed. Cir. 1991). In a proper obviousness rejection based upon a combination of any two or more prior art references, the motivation to combine must be found in the prior art. *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551, 220 U.S.P.Q. 303, 311-312 (Fed. Cir. 1983). Further, inherency cannot form the basis of an obviousness rejection because obviousness cannot be predicated on what is unknown. *See In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993). It is irrelevant that each aspect of the invention was individually present in the prior art at the time of the invention. Rather, to negate patentability, there must be something in the prior art to suggest the desirability of combining these individual elements as claimed by the applicant. *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1556, 225 U.S.P.Q.2d, 31-32 (Fed. Cir. 1985).

B. The Rejection

The obviousness rejection in the Final Office Action dated February 17, 2004 (“Final Office Action”) is as follows:

Specifically, Parikh teaches the adhesive composition comprises 5-95% polymer base and 5-95% tackifier. (Parikh, claim 1). Additionally, said adhesive composition may comprise 5-75% of the modifier HBEP. Thus, Parikh teaches the adhesive composition to comprise a minimum of 10 % required components (i.e., base polymer and tackifier). Hence, it would have been obvious to one skilled in the art to increase the modifier component (i.e. HBEP) from 75 % to up to 90 % in order to improve the tackiness and modulus of the adhesive. Such modification would not destroy the intent of the Parikh invention since the minimum requirement of 5 % base polymer and 5 % tackifier would still be met.

(Final Office Action at paragraph 3, pages 2-3.)

This rejection addresses only the adhesive composition aspect of the recited invention. However, Applicants’ claims further recite a carpet or carpet tile wherein this adhesive composition is “not integrally fused to the primary backing material,” which has “substantially penetrated and substantially consolidated the [plurality of] fibers,” where the carpet or carpet tile has a “tuft bind 5 pounds or more as measured according to ASTM D-1335-67.” Of course, *every* element of the claimed invention must be taught or suggested by

the combination of references for an obviousness rejection to be proper. *See In re Royka*, 490 F.2d 981, 985, 180 U.S.P.Q. 580, 583 (C.C.P.A. 1974).

In light of this requirement, the Final Office Action purports to supply the additional claimed features by using a single reference to carpet backings in Parikh as the alleged motivation to combine Parikh with Higgins and Fink '530. This portion of the obviousness rejection incorporates paragraph 4 of the Non-Final Office Action dated August 7, 2003 ("August 7 Office Action") which states:

[I]t would have been obvious to employ the adhesive composition of Parikh as adhesive backcoat in known carpet structures comprising a tufted primary backing and, optionally, a secondary backing, such as those taught by Higgins and Fink ['530]. Motivation to do so is found in the explicit teaching of Parikh that said composition is suited as an adhesive for coating a carpet backing, but for the lack of a teaching to a particular carpet structure.

(August 7 Office Action at paragraph 4, page 4.)

To supply the tuft bind element of the recited invention, the August 7 Office Action states the following:

With respect to the claimed tuft bind strength, it is asserted that a known carpet structure, such as that taught by Higgins and Fink, having the Parikh composition as an adhesive backcoat would meet the tuft bind strength limitation, since the carpet of the combination of art meets all the structural and chemical limitations of the claim. In other words "Products of identical compositions cannot have mutually exclusive properties." *In re Spada*, 15 U.S.P.Q.3d [sic 2d] 1655.

(August 7 Office Action at paragraph 4, pages 4-5.)

The rejection fails to address in any respect the recited elements of "substantially penetrated and substantially consolidated the [plurality of] fibers." In particular, neither the Final Office Action nor the August 7 Office Action addresses this aspect of the claimed invention.

The rationale for the obviousness rejection may be reduced to its constituent logic as follows: first, it would have been obvious to modify Parikh's compositions to provide the recited adhesive compositions and then, since Parikh mentions his compositions can be extruded onto carpet backings, it would have been obvious to combine the modified compositions with the carpet and carpet tile structures of Higgins and Fink '530 to provide

the claimed invention. That is, carpet or carpet tile “backcoated” with the modified Parikh compositions would inherently “meet all the structural and chemical limitations of the claim[s]” *i.e.*, the adhesive composition would: 1) not be integrally fused to the primary backing material; 2) it would have been “substantially penetrated and substantially consolidated the [plurality of] fibers;” and 3) have resulted in a carpet or carpet tile that would have the recited tuft bind strength. The Final Office Action reasons this result because it is contended that Parikh’s modified compositions would be “identical” in composition to the adhesive composition claimed by Applicants. (*See* August 7 Office Action at paragraph 4, pages 4-5.)

C. The Cited Prior Art

1. *The Parikh compositions*

Parikh relates to interpolymers of varying compositions where the compositions are useful as pressure sensitive adhesives. In its broadest disclosure, the compositions of Parikh can comprise entirely these interpolymers; that is, the amount of interpolymer may be 100 % by weight of the adhesive compositions. (*See* Parikh, col. 6, lines 27-28. “The interpolymers suitable for use *as*, or as components *in...*” (emphasis added).) However, when it is desired that the composition have elastomeric properties, it is preferred that the compositions comprise the interpolymers and a tackifier. (Parikh, col. 12, lines 10-17.) As discussed in Parikh’s specification, the tackifier may be present in as low as 10 % by weight of the composition, but not more than 90 % of the composition. (Parikh, col. 13, lines 10-14.)² When the tackifier is present, the interpolymer adhesive would inferentially be from 10 % to 90 % if no other materials are present; however, the only amount of interpolymer expressly specified in the specification is 40 to 60 %. (*See* Parikh, cols. 11-12, lines 65-5.)

A processing aid can also be included in the composition in an amount of from 60 to 20 %. (Parikh, col. 14, lines 26-30.) When present at this range, the interpolymer adhesive and optional tackifier must by inference necessarily vary within the balance of the processing aid range, that is, both the interpolymer and tackifier will together vary in unspecified

² As discussed below in Section D1, the reference to the amount of interpolymer and tackifier being 5-95% as stated in claim 1 of Parikh does not serve as part of the disclosure of this reference that can be used in an obvious rejection.

individual amounts within 40 to 80 %. The interpolmer composition may also optionally include an extending or modifying composition; this optional ingredient may be one of four different materials. (Parikh, cols. 14-18, lines 14-19.) The four different optional extending or modifying compositions are: a) paraffinic wax; b) crystalline polyethylene wax; c) substantially linear ethylene/alpha olefin interpolmer; or d) an ultra-low molecular weight ethylene polymer. (Parikh, cols. 14-18, lines 14-19.) With reference to a) and d), the extending or modifying composition may be present in an amount of 5 to 75 %. (Parikh, col. 19, lines 12-24.) No amount is mentioned for ingredients b) and c). (*See id.*) Additionally, additives can be present in the composition at from about 0.05 to about 50%. (Parikh, col. 18, lines 49-56.) Many different additives and combinations of additives are possible.

Parikh's compositions can be distilled as follows:

Main component:	Interpolymer adhesive material at up to 100 % (col. 6, lines 27-34) "The interpolymers suitable for use as, or as components in, the compositions of the invention, include, but are not limited to, interpolymers prepared by polymerizing one or more alpha-olefins with one or more vinylidene aromatic monomers and/or one or more hindered aliphatic vinylidene monomers, with interpolymers of ethylene, one or more vinylidene aromatic monomers, and optionally one or more alpha-olefins, being preferred."
Optional component:	Tackifier—at least 10 but no more than 90 % (cols. 12-14, lines 17-14) A. wood rosin B. tall oil and derivatives C. cyclopentadiene derivatives D. aliphatic C5 resins E. polyterpene resins F. hydrogenated resins G. mixed aliphatic aromatic resins H. rosin esters I. natural and synthetic terpenes J. terpene-phenolics K. hydrogenated rosin esters
Optional component:	Processing aid—at least 5 and no more than 60 % (col. 14, lines 26-30) A. phthalates B. oils C. liquid resins

- Optional component: Extending or modifying compositions— (cols. 14-18, lines 31-23)
- A. paraffinnic wax, 5-75 % (col. 19, lines 26-31)
 - B. crystalline polyethylene wax, no amount specified (col. 19, lines 26-31)
 - C. homogenous linear or substantially linear ethylene/alpha olefin interpolymers, no amount specified (col. 19, lines 26-31)
 - D. ultra-low molecular weight ethylene polymers 5-75 % (col. 19, lines 26-31)
- Optional component: Additives about 0.05 to about 50 % (filler up to 90 %) (col. 18, lines 24-56)
- A. antiblock additives
 - B. antioxidants
 - C. pigments
 - D. colorants
 - E. cling additives
 - F. ultraviolet stabilizers
 - G. fillers
 - H. phosphates

With respect to the class of materials that possibly relates to the HBEP³ claimed in the present invention, the class of extending or modifying compositions, *is one of four optional components* in the compositions of this reference, *i.e.*, tackifier, processing aids, extending or modifying compositions and additives. Moreover, of this *optional* class, *one may select from FOUR subclasses* one of which is homogenously linear or substantially linear ethylene/alpha olefin interpolymers, of which Applicants' HBEP is one of many possible further subclasses.

Further, Parikh discusses the use of a homogenously linear or substantially linear ethylene/alpha olefin interpolymers as one of the optional "extending or modifying" materials when the composition comprises a substantially random interpolymers which has a high

³ To expedite matters on this appeal, Applicants do not dispute that the claimed HBEP material may comprise a subclass of the homogenously linear or substantially linear ethylene/alpha olefin interpolymers disclosed in Parikh. However, Applicants note that HBEP is just one of a myriad of polymeric materials that could fall within the description of Parikh's homogenously linear or substantially linear ethylene/alpha olefin interpolymers. This may raise additional issues under *In re Jones*, 16 F.3d 380, 21 U.S.P.Q.2d 1941, 1943 (Fed. Cir. 1992) and *In re Baird*, 958 F.2d 347, 29 U.S.P.Q.2d 1550, 1552 (Fed. Cir. 1994). Applicants reserve the right to address this issue if necessary.

styrene content so as to “improve” the modulus of this adhesive. (Parikh, col. 14, lines 31-39.) Parikh thus suggests the use of homogenously linear or substantially linear ethylene/alpha olefin interpolymers *ONLY* in limited circumstances, that is, when styrene-containing interpolymers are used and when certain properties *i.e.*, “improve[d]” modulus and tack are desired with use of this type of interpolymers. *See id.*

2. *The disclosed uses for Parikh’s compositions*

Parikh indicates that the disclosed compositions are useful in applications “in which adhesives, particularly hot melt adhesives are typically employed.” (Parikh, col. 21, lines 1-3.) Examples of these uses are specified as: “packaging box and carton sealing, bookbinding, lamination of veneers to a substrate, tapes, and labels” and to make “multilayer food packaging structures.” (Parikh, col. 21, lines 3-7.) It is further indicated that Parikh’s compositions may be extruded onto a variety of substrates, including, but not limited to “carpet backing, flooring tiles and sheets, and woven and non-woven fabric.” (Parikh, col. 21, lines 7-10.) A review of the Examples indicates that Parikh’s compositions are being tested for their suitability as pressure sensitive adhesives since the G' (modulus) and T-peel strength are being examined. (*See* Parikh at Examples; *see also* Parikh, col. 20, lines 3-67.) As would be understood by one of ordinary skill in the art, such properties are associated with pressure sensitive adhesives.

Other than this single reference to carpet backings, Parikh does not mention *how* the compositions could be used in carpet backings or *what affect* the compositions would have if used in carpet backings.

3. *The Higgins and Fink ‘530 references*

While Higgins and Fink ‘530 generally discuss carpet and/or carpet tile structures, neither of these references disclose how a backcoat material may be incorporated into the structures. Higgins discloses a polyurethane-backed carpet or carpet tile structure (Higgins, col. 1, lines 5-12.) Higgins discloses that the backcoat can be a hot melt material, as well as other materials; there is no disclosure whatsoever as to the composition of this material, or of how the material is incorporated into the structure or what is the resulting tuft bind strength of the carpet structure. (*See* Higgins, col. 6, lines 25-34.) Fink ‘530 discloses a carpet structure having an extruded sheet of polyolefin polymer. (*See e.g.*, Fink ‘530 at abstract.) It appears that the polyolefin functions as a backcoat-type material. (*See e.g.*, Fink

‘530, col. 8, lines 54-61.) Significantly, Fink ‘530 affirmatively requires that the extruded sheet of polyolefin polymer *be integrally fused* with the primary backing. (See e.g., Fink ‘530 at abstract.) Moreover, Fink ‘530 does not disclose any tuft bind strength, nor does it address how the polyolefin polymer is incorporated with the plurality of fibers.⁴

D. The Obviousness Rejection is Legally Insufficient

The obviousness rejection bears the classic hallmark of a rejection where hindsight reconstruction is being used to pick and choose among isolated disclosures in the prior art to find Applicants’ invention unpatentable. A review of the cited prior art demonstrates that there is no motivation to modify the Parikh reference as alleged. Moreover, even assuming Parikh contained the required motivation to combine the secondary references, Higgins and Fink ‘530, the combined prior art still would not yield the claimed invention. Also, there are a number of legal errors in the Final Office Action that further require the rejection to be overruled. To summarize, the basis for overruling the obviousness rejection involve at least the following:

- The Final Office Action improperly relies on the Parikh’s claims as disclosure in determining obviousness
- It would not have been obvious to modify Parikh’s ranges
- The principal of operation of Parikh would be altered by the proposed modification
- The Final Office Action is reading the Parikh reference out of its context
- Parikh does not teach or suggest that homogenously linear or substantially linear ethylene/alpha olefin interpolymers independently possess adhesive properties
- Parikh does not provide a “clear and particular” teaching or suggestion of the use of those compositions as a backcoat type adhesive
- Parikh presents no reasonable expectation of success that those compositions may be used as backcoat adhesives to provide the claimed carpet and carpet tiles
- Parikh is not analogous art
- Fink ‘530 appears to be cited in error
- The secondary references do not supply the carpet or carpet tile aspects of Applicants’ claims
- The combination of Parikh with Higgins and Fink ‘530 improperly relies on allegedly inherent features as the basis of an obviousness rejection
- The data of Applicants’ specification demonstrate that “all hot melt type adhesives are not created equal”

⁴ As discussed below in Section D9, Fink ‘530 is a direct counterpart application of a PCT application which was previously expressly withdrawn as prior art in paragraph 2 of the Office Action dated January 15, 2003. Therefore, it would appear that Fink ‘530 was cited against the present invention in error.

- Technical errors in the Final Office Action

1. *The Final Office Action improperly relies on Parikh's claims as disclosure in determining obviousness*

The Final Office Action cites the claims of Parikh as disclosing "5- 95% polymer base and 5-95 % polymer base." (Final Office Action at paragraph 3, page 2.) The claims of a patent are not part of the disclosure for assessing whether Applicants' invention is obvious. *See In re Benno*, 768 F.2d 1340, 1345, 226 U.S.P.Q. 683, 686-687 (Fed. Cir. 1985). Therefore, the 5-95% stated in the claims cannot be used as the starting point for the range of the obviousness rejection. Since there is no legally appropriate range presented in the Final Office Action to serve as the starting point for the obviousness rejection, the rejection should be overruled for at least this reason.

2. *It would not have been obvious to modify Parikh's ranges*

As noted above, the primary basis of the obviousness rejection is flawed. Thus, the rejection should be overruled for this reason alone. However, to ensure that Applicants' are able to address the other numerous grounds for error in the Final Office Action, it will be assumed for the purposes of this appeal that it would be contended that alternate disclosure is present in Parikh that would serve to form the basis of an obviousness rejection.

To this end, the rationale of the Final Office Action starts first with an identification of a range of materials, in particular, the range of interpolymer main components and the optional extending or modifying composition of which homogenously linear or substantially linear ethylene/alpha olefin interpolymer is a possible type. Reviewing Parikh's specification for the disclosure of "base polymer" *i.e.*, the interpolymer adhesive material of Parikh, the only other range of amount of interpolymer adhesive material in Parikh is 60 to 40 %. (Parikh, col. 11-12, lines 63-5.) While the numerous optional ingredients can be varied within the specified ranges, there is no other express range disclosed for the amount of interpolymer component. Thus, this 60 to 40 % amount would have to form the basis of an alternate obviousness rejection relating to the range of materials in Parikh's compositions.

Using this 60 to 40 % range as the starting point, there must be a teaching or suggestion to reduce the amount of main interpolpolymer adhesive and to increase the amount of the optional extending or modifying composition⁵ to beyond the 5 to 75 % disclosed in Parikh to result in the about 80 to about 99 % HBEP claimed by Applicants. This teaching or suggestion is clearly absent from Parikh.

The extending or modifying compositions are just that—extenders or modifiers. Indeed, it is clear from Parikh’s disclosure that this is the material that provides the adhesive qualities of the composition when it is stated:

The subject invention pertains to olefin-based compositions. In particular, the subject invention pertains to compositions comprising at least one substantially random interpolpolymer of at least one alpha-olefin and a vinylidene aromatic monomer or a hindered aliphatic vinylidene monomer, preferably at least one substantially random interpolpolymer of ethylene, optionally at least one alpha-olefin and a vinylidene aromatic monomer, in conjunction with at least one tackifier, and optionally at least one extending or modifying composition or processing aid.

(Parikh, col. 1, lines 11-20.)

Parikh further states that “the industry seeks to improve the applicability of these substantially random interpolpolymers.” (Parikh, col. 1, lines 36-38.) From this and other statements in Parikh, one of ordinary skill in the art would understand that Parikh’s disclosure is directed toward one end—to improve the performance of the substantially random interpolpolymer materials.

It defies logic to contend that one of ordinary skill in the art would read from Parikh a teaching or suggestion to decrease the amount of the main adhesive ingredient of Parikh and to at the same time increase the amount of this optional secondary material to the greater amount claimed by Applicants. There is simply no motivation to modify the ranges of Parikh to result in adhesive composition recited in the claimed invention. Therefore, the rejection should be overruled for at least this reason.

⁵ As discussed below in Section D4, Applicants contend that Parikh’s disclosure does not disclose 5 to 75% of homogenously linear or substantially linear ethylene /alpha olefin interpolpolymer.

3. *The principal of operation of Parikh would be altered by the proposed modification*

The Final Office Action contends that the intent of the Parikh reference would not be altered by the proposed modification. However, this is incorrect. Parikh addresses interpolymers compositions where homogenously linear or substantially linear ethylene/alpha olefin interpolymers are *optional extending or modifying* ingredients. If the amount of homogenously linear or substantially linear ethylene/alpha olefin interpolymers was increased as proposed by the Final Office Action, Parikh's compositions would no longer relate to interpolymers adhesive compositions which properties were modified by other materials. Rather, the compositions would relate to compositions based upon optional and secondary materials with unknown adhesive properties. The proposed modification would therefore change the principle of operation of the reference and is accordingly improper. *See In re Ratti*, 270 F.2d 810, 813, 123 U.S.P.Q. 349, 351 (C.C.P.A. 1959).

4. *The Final Office Action is reading the Parikh reference out of its context*

The Final Office Action uses a selective reading of Parikh to support the obviousness rejection. The only mention of the amount of extending or modifying composition in Parikh is in the following passage:

The adhesive of the invention may further comprise at least one modifying composition, as described above. When such a modifying composition is employed, it will typically be present in the adhesive system in an amount of from 5 to 75 weight %. One such modifying composition is a traditional wax or an ultra-low molecular weight ethylene polymer. In some instances, the ultra-low molecular weight ethylene polymer will be an interpolymers of ethylene and at least one vinylidene aromatic comonomer or hindered aliphatic vinylidene comonomer.

(Parikh, col. 19, lines 25-37.)

It is noteworthy that the above section does not even mention homogenously linear or substantially linear ethylene/alpha olefin interpolymers; rather, only two of the four other possible materials that can be used as extending or modifying materials are described as possibly falling into the recited range.

To the extent that Parikh even suggests that homogenously linear or substantially linear ethylene/alpha olefin interpolymers can be used as the extending or modifying compositions in the adhesive compositions, such suggestion is only when the interpolymers

includes a styrene-containing interpolymers *AND* when it is desired to “improve” the modulus and tack of the styrene interpolymers. (See Parikh, col. 14, lines 40-51.) This passage does not mention the amount of homogenously linear or substantially linear ethylene/alpha olefin interpolymers that can be used. Moreover, this reference suggests the use of homogenously linear or substantially linear ethylene/alpha olefin interpolymers may be used, only when the main ingredient—the interpolymers—contains styrene and it is desired to improve the modulus and tack of *this specific interpolymers*.

The 5 to 75 % range presented in col. 19, lines 25-37 would be irrelevant to the amount needed for this desired improvement since the suggested addition of homogenously linear or substantially linear ethylene/alpha olefin interpolymers to the interpolymers composition is based on the desired modulus improvement. That is, the range of homogenously linear or substantially linear ethylene/alpha olefin interpolymers to be added would not be a function of the disclosed 5 to 75 % range but, rather, the amount necessary to obtain the desired improvement. While the amount identified by the Final Office Action as the alleged baseline range to provide this improvement *may* fall within this range, the 5 to 75 % range mentioned does not serve as the basis of the suggestion to modify the amount of homogenously linear or substantially linear ethylene/alpha olefin interpolymers.

The Final Office Action is taking a selective reading of the Parikh disclosure to provide the alleged motivation to increase the amount of homogenously linear or substantially linear olefin interpolymers. It is improper to pick and choose from any one reference only so much of it that will support a given position without addressing the full appreciation of what the reference would suggest to one of ordinary skill in the art. *In re Wesslau*, 353 F.2d 238, 240, 147 U.S.P.Q. 391, 393 (C.C.P.A. 1965). The rejection should be overruled for this additional reason.

5. *Parikh does not teach or suggest that homogenously linear or substantially linear ethylene/alpha olefin interpolymers independently possess adhesive properties*

Significantly, Parikh is absolutely silent as to whether homogenously linear or substantially linear ethylene/alpha olefin interpolymers independently possess any adhesive properties. One of ordinary skill desiring to obtain an adhesive composition would not be motivated to use homogenously linear or substantially linear ethylene/alpha olefin interpolymers in any amount let alone as the main ingredient in an adhesive composition. It

thus follows that since one of ordinary skill in the art would not be motivated to use homogenously linear or substantially linear ethylene/alpha olefin interpolymers as adhesive polymers at all, that person would not be motivated to increase the amount as contended in the Final Office Action. *See Gore*, 721, F.2d at 1552, 18 U.S.P.Q.2d at 1888.

A fair reading of Parikh makes it evident that homogenously linear or substantially linear ethylene/alpha olefin interpolymers are *a very minor (and optional)* possible ingredient in Parikh's adhesive compositions and that *there is no disclosure that these materials can even function as adhesives at all*. The record shows that the only disclosure of the adhesive properties of this material is in Applicants' own disclosure. It is well settled that Applicants' disclosure cannot be used as a roadmap to result in the claimed invention because this constitutes hindsight reasoning. Put another way, "[t]o rely on an equivalence known only to the applicant to establish obviousness is to assume that his disclosure is part of the prior art. The mere statement of this proposition reveals its fallaciousness." *In re Ruff*, 256 F.2d 590, 596, 118 U.S.P.Q. 340, 346-347, 118 U.S.P.Q. 340 (C.C.P.A. 1958). Thus, the obviousness rejection is in error for this additional reason.

6. *Parikh does not provide a "clear and particular" teaching or suggestion of the use of those compositions as a backcoat type adhesive*

Even assuming Parikh's disclosure suggested the claimed adhesive compositions, there is no "clear and particular" teaching or suggestion that these materials can be combined with Higgins and Fink '530. *See e.g., In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999.) Parikh states that his adhesive compositions may be *extruded onto*, a number of materials, including carpet backings. (Parikh, col. 21, lines 7-8.) The context of this disclosure indicates that Parikh's adhesive compositions may be applied to the surface of objects where adhesive properties are needed. This is an expected use of Parikh's compositions because they are disclosed throughout the reference as being suitable as pressure sensitive adhesives based upon the G' modulus and T-peel strength measurements. (*See e.g.,* Parikh Tables 1, 3, 4, 5A, 5B, and 7.) Thus, the clear context of the Parikh's disclosure is that these materials might be suitable to adhere a finished carpet structure to

another structure, *e.g.*, a floor surface.⁶ There is no basis to infer from this disclosure that Parikh's adhesive compositions can be used as the backcoat in a carpet or carpet fibers. Without the required particularity in Parikh that the adhesive compositions, whether modified or otherwise, can be used as backcoat materials, Parikh cannot be combined with Higgins and Fink '530 as contended in the Final Office Action.

7. *Parikh presents no reasonable expectation of success that those compositions may be used as backcoat adhesives to provide the claimed carpet and carpet tiles*

Parikh makes only a passing reference that his adhesives can be extruded onto carpet tiles. There is no detail whatsoever what carpet or carpet tile structure would result from such use. Accordingly, there is no reasonable expectation that Parikh's compositions, whether used as-is or modified, would provide a carpet or carpet tile structure where the adhesive composition was "not integrally fused to the primary backing," where the composition had substantially penetrated and substantially consolidated the [plurality of] fibers" and where the resulting carpet would have a tuft bind strength of 5 pounds or more. Without a teaching or suggestion of the requisite reasonable expectation of success, the obviousness rejection must fail.

8. *Parikh is not analogous prior art to the claimed invention*

The reasonable reading of Parikh's disclosure is that it relates to pressure sensitive adhesives. Such materials are used to glue or laminate a structure to another surface. The present invention relates to backcoat adhesives for carpet or carpet tiles and the structures formed therefrom. The Parikh reference is neither from the same field of endeavor of Applicants' invention, nor is it reasonably pertinent to the particular problem with which the inventor is involved. Therefore, Parikh is not properly cited against the claimed invention. *See e.g., In re Clay*, 966 F.2d 656, 659, 23 U.S.P.Q.2d 1058, 1060 (Fed. Cir. 1992).

⁶ As discussed in the Amendment dated October 28, 2002, the use of pressure sensitive adhesives on the back of the carpet and carpet tile structures of the present invention are discussed in the as-filed application. These arguments are herein incorporated in their entireties by the reference.

9. *Fink '530 appears to be cited in error*

One of the prior art references cited is the Fink '530 patent. It appears that this reference has been cited in error.

In the August 28, 2002 Office Action, PCT publication number WO93/15909 to Fink ("Fink PCT") was cited used in a prior art rejection. In response to this rejection, in the October 28, 2002 Amendment, Applicants amended their claims to recite that the claimed adhesive composition was "not integrally fused to the primary backing." As acknowledged in the January 15, 2003 Office Action, this amendment expressly distinguished the claimed invention from the Fink reference because Fink requires that the polyolefin used as an adhesive material result in the adhesive being "integrally fused" to the primary backing. As a result, Fink PCT was removed as a reference. (See January 15 Office Action at paragraph 2.)

Fink '530 at issue in this appeal is a direct continuation of the application to which Fink PCT claims priority. Further, a comparison of Fink '530 and Fink PCT demonstrates that the disclosure of Fink '530 is substantially identical and may even be identical to Fink PCT. That is, Fink '530 discusses the requirement that the polyolefin material be integrally fused to the primary backing material. (See *e.g.*, Fink '530 at Abstract.) Accordingly, this reference possesses the same deficiencies as a prior art reference as Fink PCT. Since there were no additional bases to cite the Fink '530 reference as prior art over the reasons that were expressly withdrawn for the Fink PCT reference, it appears that Fink '530 was cited in error.⁷ This prior art reference should therefore be withdrawn.

10. *The secondary references do not supply the carpet or carpet tile aspects of Applicants' claims*

As a further grounds of error in the obviousness rejection, even assuming that Parikh suggests the claimed adhesive compositions and Parikh described the use of his adhesive

⁷ Additionally, in the October 28, 2002 Office Action, Applicants provided numerous other arguments why Fink PCT (and thus the presently cited Fink '530) was not applicable as prior art against the claimed invention. For brevity, and since it appears that an error was made in citing Fink '530 against the claimed invention, those arguments are not repeated herein. However, Applicants hereby incorporate the arguments of this Office Action with regard to the Fink PCT reference.

compositions as a backcoat, neither Higgins nor Fink '530 teach or suggest the remainder of the claimed features of Applicants' invention.

As noted above, Fink '530 requires that the adhesive be integrally fused to the primary backing. This disclosure is in direct contradiction to the claims which recite that the adhesive composition is "not integrally fused to the primary backing." This expressly opposite result from that dictated in Fink '530 means that this reference cannot form the basis of an obviousness rejection. This is the essence of "teaching away." *See Gore*, 721 F.2d at 1550-51, 220 U.S.P.Q. at 311.

Further, Fink '530 does not teach or suggest the "substantially penetrated" and "substantially consolidated" aspects of the claimed invention, nor does it teach or suggest the combination of a further reference that incorporates these features. Therefore, Fink '530 is not a proper reference for at least this additional reason.

As for Higgins, while this reference discloses that hot melt adhesives could be used as a backcoat material, there is no disclosure as to what type of hot melt adhesive can be used. Further, there is no disclosure as to how such a hot melt adhesive would be incorporated into the plurality of fibers or how it would be fused to the primary backing therein. The absence of a teaching or suggestion of these claimed features in Higgins requires the obviousness rejection to fail for this additional reason.

11. *The combination of Parikh with Higgins and Fink '530 improperly relies on allegedly inherent features as the basis of an obviousness rejection*

The logic of the Final Office Action, as the rejection incorporates paragraph 4 of the August 7 Office Action, is legally improper. The August 7 Office Action states:

[I]t would have been obvious to employ the adhesive composition of Parikh as adhesive backcoat in known carpet structures comprising a tufted primary backing and, optionally, a secondary backing, such as those taught by Higgins and Fink. Motivation to do so is found in the explicit teaching of Parikh that said composition is suited as an adhesive for coating a carpet backing, but the lack of a teaching to a particular carpet structure.

With respect to the claimed tuft bind strength, it is asserted that a known carpet structure, such as that taught by Higgins and Fink, having the Parikh composition as an adhesive backcoat would meet the tuft bind strength limitation, since the carpet of the combination of art meets all the structural and chemical limitation, since the carpet of the combination of art meets all the structural and chemical limitations of the claim. In other words "Products of identical compositions cannot have mutually exclusive properties." *In re Spada*, 15 U.S.P.Q.3d [*sic* 2d] 655.

(August 7 Office Action at paragraph 4, pages 4-5.)

The logic of this obviousness rejection is as follows: Parikh suggests modification of his compositions to the ranges claimed by Applicants and the use of these modified adhesives extruded onto carpet backings. Both Higgins and Fink '530 are silent as to the tuft bind strength of the structures therein. Higgins and Fink '530 are also silent as to the incorporation of the backcoat into the fibers. Further, Higgins is wholly unspecific as to what type of hot melt material could be used as a backcoat. (See Higgins, col. 6, lines 23-36.) Fink '530 addresses several types of melted polyolefin materials as backcoat materials.⁸ The claimed carpet and carpet tiles then result.

In view of the absence of disclosure in the Higgins and Fink '530 references, the obviousness rejection must necessarily rely on the allegedly inherent features of the Higgins and Fink '530 references. The reliance on inherent features to make an obviousness rejection is legally improper. See *In re Spormann*, 363 F.2d 444, 448, 150 U.S.P.Q. 449, 452 (C.C.P.A. 1966) (stating that "obviousness cannot be predicated on what is unknown.")

12. *The data of Applicants' specification demonstrate that "all hot melt type adhesives are not created equal"*

As noted, the obviousness rejection relies on the allegedly inherent features of the carpet and carpet tile structures of Higgins and Fink '530. The allegation is that the since Applicants' compositions are allegedly identical to the modified Parikh compositions, backcoating of Higgins and Fink '530's carpets and carpet tiles with this modified composition would necessarily result in the claimed features. Put another way, the Final Office Action appears to contend that "all hot melt-type adhesives are created equal" when used as backcoats for carpets or carpet tiles. Both Table D of Fink '530 and, *inter alia*, Applicants' Examples 9-12 (Table 2), 54 (Table 4), 84-86 (Table 6), and 141 (Table 14) demonstrate the factual error of this reasoning.

In particular, under the reasoning of the Final Office Action, any polymeric material that is applied in melted form is denoted as a "hot melt adhesive." Using this rationale, the

extruded materials of Fink '530 must meet this definition. This reasoning is confirmed by the statements in paragraph 4 of the August 7 Office Action that indicates that Fink's materials are contended to be hot melts. Table D of Fink '530 demonstrates that polyethylene polymers are not suitable for the fusion layer, whereas other types of polymer materials provide a good bond. As described in the Figures of Fink '530, it is this fusion layer that comprises the backcoat layer of Fink 530's carpet and carpet tile structures. Moreover, the above-referenced Examples of the instant application comparatively show that tuft bind strength varies significantly among "hot melt" (as this term is used in the Final Office Action) polymer types. This data demonstrates that, contrary to the reasoning of the Final Office Action, all "hot melt" adhesives are not equally useful for binding the fibers when applied to carpet or carpet tile backing structures. Accordingly, the obviousness rejection is not sustainable for at least this additional reason.

13. *Rejection of Claim 17*

The Final Office Action has lodged an additional rejection of claim 17 over Parikh in view of Higgins and Fink '530 and further in view of Jialanella. As shown above, the legal and factual rationale for the rejections of claims 1, 3-6, 9-12 and 15-16 over the combination of Parikh, Higgins and Fink '530 cannot be sustained. The rejection of claim 17 must also fail for these same reasons.

14. *Other grounds of error in the Final Office Action*

Applicants believe that the above discussion clearly demonstrates that the obviousness rejection is improper for a number of reasons. However, to preserve their rights to make additional arguments in a later proceeding, if necessary, the following additional grounds for error in the Final Office Action are briefly discussed.

- a) *The Final Office Action improperly takes from Parikh a description of an improvement as the motivation to modify those compositions*

In providing a rationale for the obviousness rejection, the Final Office Action alleges that one of ordinary skill in the art would increase the amount of the homogeneously linear or

D.) ⁸ Significantly polyethylene materials are stated to be ineffective for this use. (See Fink '530 at Table

substantially linear ethylene/alpha olefin interpolymers and decrease the other ingredients to “improve” the tackiness and modulus of the formulations. Nonetheless, the Final Office Action fails to explain what an “improvement” is in the context of the claimed invention. In particular, what does the Final Office Action mean by “improve” in relation to the tackiness and modulus of the adhesive polymer? And, how would such improvements affect the claimed adhesive compositions? Since there is no explanation provided as to why these features would be beneficial to the recited compositions, Applicants are left to speculate as to the basis for the suggestion or motivation to increase the amount of homogeneously linear or substantially linear ethylene/alpha olefin interpolymers. This failure to make express factual findings regarding the cited prior art and how one of ordinary skill in the art would have been motivated to use the prior art renders the obviousness rejection improper.

b) *The Final Office Action improperly incorporates a previous office action in the final rejection*

The Final Office Action indicates that a significant portion of the obviousness rejection of claim 1 is based upon the rationale of paragraph 4 of the August 7 Office Action. The August 7 Office Action purports to rely on the rationale of *In re Spada* to find the claims as pending in that Office Action obvious. As acknowledged in the August 7 Office Action, the legal principal of *In re Spada* addresses an identity of a claimed composition and a composition in the prior art. However, the adhesive composition recited in the claims pending in the Final Office Action (and in this appeal) is different than the composition pending when *In re Spada* was cited, a fact which is expressly acknowledged in the Final Office Action. Given the change in the adhesive composition aspects as a result of these amendments and that the grounds for the previous rejection was based upon an alleged previous identity of the claimed composition and the as-disclosed Parikh composition, it was improper for the Final Office Action to restate the rejection from the previous Office Action without consideration of the fact that the claims had been amended. Therefore, there is, in fact, not a proper rejection presented against the claimed invention in the Final Office Action.

c) *Parikh's Pressure Sensitive Adhesives Would Not Be Suitable for Use as Claimed by Applicants*

One of ordinary skill in the art would read Parikh to disclose pressure sensitive adhesives. Such materials would be understood to be permanently tacky. *See e.g., Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1447, 223 U.S.P.Q. 603 (Fed. Cir. 1984) (“If necessary, we take judicial notice that a pressure sensitive adhesive is permanently tacky.” (footnote omitted).) Such materials would be unsuitable for use as claimed by Applicants because dirt, hair, liquids and odors would be adhered to the adhesive. This would quickly decrease the aesthetic quality of the carpet or carpet tile structures to a consumer. Further, since the adhesive is recited as “substantially penetrating” and “substantially consolidating” the plurality of fibers, a person walking on the surface of the structure would likely feel some tackiness from exposed adhesive. This would be very undesirable to the consumer, thus making a pressure sensitive adhesive, such as those disclosed by Parikh, unsuitable for use as claimed by Applicants.

d) *The Final Office wholly fails to address the recited aspects of “substantially penetrated and substantially consolidated”*

As noted above in Section B, the Final Office Action did not address in any manner the recited aspects of “substantially penetrated and substantially consolidated the [plurality of] the fibers.” To be legally sufficient, an obviousness rejection must specifically address each claimed aspect. Since the Final Office Action failed to do this, an additional ground for error in the Final Office Action is present.

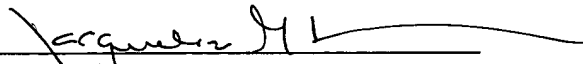
IX. CONCLUSION

From the above detailed discussion, it is apparent that there is no basis to sustain the obviousness rejection stated in the Final Office Action. The cited prior simply does not render the claimed invention obvious. Rather than allowing the claims as is legally required, the Final Office Action, as well as the numerous prior Office Actions issued in this application, have cobbled together isolated references to the individual aspects of the claimed invention present in the prior art to allege with impermissible hindsight that Applicants' invention would have

been obvious. In sum, while there may be a subjective belief that the claimed invention is not patentable, the objective evidence shows otherwise. And, since patentability is based on the objective record, the obviousness rejection must not stand.

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Respectfully submitted,

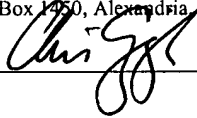
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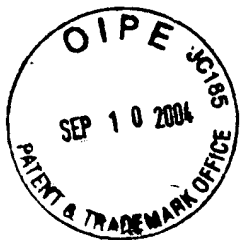
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Chris Czajka

Date 9/10/04



X. APPENDIX

Claims

1. A carpet or carpet tile comprising:
 - a. a primary backing material having a face and a back side;
 - b. a plurality of fibers attached to the primary backing material and extending from the face of the primary backing material and exposed at the back side of the primary backing material; and
 - c. an adhesive composition, wherein the adhesive composition comprises a polymer component comprising from about 80 to about 99 weight % based upon total weight of the polymer component of at least one homogeneously branched ethylene polymer characterized as having a short chain branching distribution index (SCDBI) of greater than or equal to 50 %, wherein the adhesive composition has substantially penetrated and substantially consolidated the fibers, wherein the adhesive composition is not integrally fused to the primary backing material, and wherein the carpet has a tuft bind of 5 pounds or more as measured according to ASTM D-1335-67.
2. Canceled
3. The carpet or carpet tile of claim 1 wherein the homogeneously branched ethylene polymer is an interpolymer of ethylene with at least one C₃-C₂₀ α-olefin.
4. The carpet or carpet tile of claim 1 wherein the homogeneously branched ethylene polymer is a copolymer of ethylene and one C₃-C₂₀ α-olefin.
5. The carpet or carpet tile of claim 4 wherein the one C₃-C₂₀ α-olefin is selected from the group consisting of propylene, 1-butene, 1-isobutylene, 1-pentene, 1-hexene, 4-methyl-1-pentene, 1-heptene and 1-octene.
6. The carpet or carpet tile of claim 5 wherein the one C₃-C₂₀ α-olefin is 1-octene.
- 7-8. Canceled

9. The carpet or carpet tile of claim 1 wherein (i) the fibers, primary backing and adhesive composition all comprise a polyolefin polymer, (ii) the olefin monomer chemistry of the polymer component in the adhesive composition differs from that of the fibers and the primary backing, and (iii) the carpet includes a label or literature at the time of sale which represents that the carpet is recyclable without segregation of carpet components.
10. The carpet or carpet tile of claim 1 wherein the at least one homogeneously branched ethylene polymer is further characterized as having a single differential scanning calorimetry, DSC, melting peak between -30 and 150 °C.
11. The carpet or carpet tile of claim 10 wherein the at least one homogeneously branched ethylene polymer is a substantially linear ethylene polymer characterized as having:
 - a. a melt flow ratio, $I_{10}/I_2 > 5.63$,
 - b. a molecular weight distribution, M_w/M_n as determined by gel permeation chromatography and defines by the equation:

$$(M_w/M_n) < (I_{10}/I_2) - 4.63$$
, and
 - c. a gas extrusion rheology such that the critical shear rate at onset of surface melt fracture for the substantially linear ethylene polymer is at least 50 % greater than the critical shear rate at the onset of surface melt fracture for the linear ethylene polymer, wherein the linear ethylene polymer has a homogeneously branched short chain branching distribution and no long chain branching, and wherein the substantially linear ethylene polymer and the linear ethylene polymer are simultaneously ethylene homopolymers or interpolymers of ethylene and at least one C_3 - C_{20} α -olefin and have the same I_2 and M_w/M_n and wherein the respective critical shear rates for the substantially linear ethylene polymer and the linear ethylene polymer are measure at the same melt temperature using a gas extrusion rheometer.
12. The carpet or carpet tile of claim 1 wherein the at least one homogeneously branched ethylene polymer is homogeneously branched linear ethylene polymer.
- 13-14. Canceled.

15. The carpet or carpet tile of claim 1, wherein the primary backing material consists essentially of a polypropylene material.
16. The carpet or carpet tile of claim 1, further comprising a secondary backing material adjacent to the adhesive backing material.
17. The carpet or carpet tile of claim 16, wherein the secondary backing material comprises at least one homogenously branched ethylene polymer characterized as having a short chain branching distribution index (SCDBI) of greater than or equal to 50 %.